Potentiometric liquid-level measuring device BM 500

- independent of product properties
- immune to deposits and foam
- particularly suitable for small tanks
- defined empty signalling function
- sanitary installation
- fast response time
- Level measurement possible from 2"... 32" or 50 mm ... 810 mm
The BM 500 level gauge operates on the potentiometric measuring principle and is designed for use in all electrically conductive products with a minimum conductivity of 1 µS/cm (e.g. distilled water).

This method is particularly suitable for measuring levels in small vessels containing viscous, pasty or heavily caking products. The electronic evaluation unit is integrated in the connecting head and supplies a level-proportional output signal of 4 ... 20 mA. The HWM 500 sanitary process welding sleeve ensures installation in conformity with standards of hygiene. Due to its high temperature resistance (285°F or 140°C), the BM 500 is eminently suitable for CIP cleaning and sterilizing processes.

### Fields of application
- Fruit juice
- Ketchup
- Beer
- Toothpaste
- Dairy products

### Technical data

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<th>Primary head</th>
<th>BM 500</th>
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<td>potentiometric level measurement</td>
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<td>Process conditions</td>
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<td>Pressure</td>
<td>-14.5 ... 145 psig or -1 ... 10 bar</td>
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<tr>
<td>Process temperature</td>
<td>-4...+285°F or -20...+140°C</td>
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<td>Conductivity</td>
<td>≥ 1 µS/cm</td>
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<td>Materials</td>
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<td>Sensor</td>
<td>SS 316 Ti, 0.4” or 10 mm dia.</td>
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<td>Housing</td>
<td>SS 303</td>
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<td>Insulating</td>
<td>PEEK (FDA accepted)</td>
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<td>Versions</td>
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<td>Length of sensor (inches)</td>
<td>7.9 ... 79</td>
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<tr>
<td>Length of sensor (mm)</td>
<td>200 ... 2000</td>
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<tr>
<td>Process connection</td>
<td>Tri-Clamp or other</td>
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<tr>
<td>Installation position</td>
<td>from bottom to top, automatic identification of bottom/top</td>
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</table>

### Electronic unit
- Current output: 4...20 mA, load impedance max. 500 Ω
- Supply power: 18...36 V DC, 120 mA
- Accuracy: < 1% of sensor length
- Repeatability: < 0.5%

### Electrical connection
- Cable gland or M12 plug

### Type of protection
- IP 67 equivalent to NEMA 4

### Approvals
- 3 A, EHEDG

### Accessories
- Welding sleeve HWN 500
Sanitary sleeve of stainless steel 316 Ti, with welding mark for defined alignment of cable gland or M12 plug.

Sanitary adapter sleeves available for other process connections

Adapter sleeve available.

### Electrical connections and Dimensions

![Electrical connections and Dimensions](image)

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